

IN THE SPECIFICATION:

Please replace the title with the following amended title:

~~FLEXIBLE~~ IMAGER AND DIGITAL IMAGING METHOD

Please replace paragraph 42 (beginning on page 13 and continuing to page 14) with the following amended paragraph:

One of the applications contemplated for the inventive method is aircraft inspection. This application is illustrated in Figure 9, where subject 200 is a portion of an aircraft, for example a commercial aircraft. For the arrangement shown in Figure 9, the subject 200 is a fuselage 200, and the flexible imager 100 is wrapped around at least a portion of fuselage 200 and, more particularly, around an outer skin 244 of fuselage 200. As shown in Figure 9, fuselage 200 includes a frame 236, a number of stringers 234 and at least one porthole 242, and radiation source 300 is positioned on deck 238. Currently, inspection of commercial airliners requires disassembly of the side panels and insulation 232 to inspect the structurally critical frames 236 and stringers 234 of the fuselage 200. However, the inventive method facilitates inspection of stringers 234 and frame 236 through insulation 232, overhead bins 230, and sidewalls 240, thereby permitting inspection without disassembly, which reduces inspection costs and avoids potential problems associated with reassembly of the insulation 232. Beneficially, flexible digital imager 100 can be formed in large sheets, for example using polyimide a-Si sheets, such as those commercially available from Iowa Thin Films Technology, Inc. This large-scale embodiment of flexible digital imager 100 is transportable in rolls, which can be wrapped around fuselage 200, for inspection of fuselage. One exemplary radiation source 300 is a panoramic x-ray tube 300 powered by a high voltage power supply (not shown). Panoramic x-ray tubes emit radiation with a broad angular distribution, for example in excess of about sixty degrees. However, the digital imaging method is not limited to any specific type of radiation source 300. In this manner, aircraft structures 200, such as fuselages ~~300~~ 200 can be efficiently inspected, providing digital images and avoiding the use and disposal of volumes of x-ray film.